VIA ELECTRONIC MAIL,
AND U.S. MAIL

December 22, 2006 SR-6J

Mr. Jerry C. Winslow
Principal Environmental Engineer
Xcel Energy
414 Nicollet Mall (Ren. Sq. 8)
Minneapolis, Minnesota 55401

RE: Comments on Xcel's Response to EPA's Comments on the Draft HHRA, Ashland/NSP Lakefront Superfund Site

Dear Mr. Winslow:

On August 15, 2006, the United States Environmental Protection Agency (EPA) sent Northern States Power Company (NSPW)/Xcel Energy's (Xcel) comments on the draft Human Health Risk Assessment (HHRA) for the Ashland/Northern States Power Lakefront Superfund Site. On October 27, 2006, Xcel sent responses to EPA's comments. Pursuant to the Administrative Order on Consent (AOC), EPA requires Xcel to make modifications to the HHRA based on the comments provided below. In addition, please make modifications to the HHRA based on the comments you agreed to in the October 27th response letter. Under Section X of the Administrative Order on Consent (AOC), this letter constitutes a notice of deficiency and Xcel has 21 days to cure the deficiencies before EPA makes modifications to the HHRA pursuant to Paragraph 21(c). Xcel is receiving the letter today, starting the 21 day clock to incorporate these comments and submit the revised HHRA by January 12, 2007. Xcel requested additional time and by this letter EPA is giving Xcel another (13) days, until January 25th, to submit the revised HHRA.

General Comments

1. **Response to General Comment Number 1:** The text must state exactly what datasets are used in the HHRA. Include a column to Tables 1 through 9 to indicate who collected samples.

   As stated in the previous comment letter dated August 15, 2006, the RI Report and HHRA were lacking a comprehensive summary of all environmental investigations and related reports that were used in the report. It was our understanding that the investigations and sampling leading up to the RI Report were supplemental tasks to fill data and information gaps related to prior investigation activities at the Site. Therefore, it is imperative that the RI and related reports clearly identify what those data sources were, what gaps existed and were they filled. Unfortunately, the data that appears in the RI Report is not well presented nor clearly referenced to allow a reader to easily determine its source.

2. **Response to General Comment Number 2:** If a chemical is present above saturation limits, it should be considered as "free product" or if the sum of organic compounds within a sample is above the natural attenuation capacity of the soil, this is also indicative of free product. In Table 14, maximum concentrations of several compounds (ethylbenzene, xylene, n-butylbenzene, sec-butlybenzene, and toluene) are present above saturation limits. These samples should be evaluated separately in the HHRA.

   An evaluation of saturation limits and soil attenuation capacity is important, as supported by WDNR Guidance "Determining Residual Contaminant Levels Using the EPA Soil Screening Level Web Site, WDNR PUB-RR-682 January 11, 2002., which states: "For instance, when a contaminant's RCL is at its soil saturation concentration, then no other contaminant (at whatever level) can be present; otherwise, the physical soil capacity to hold the contaminant is exceeded. If several contaminants are present, their individual soil-saturation-concentration RCLs must be scaled downward to make sure that the soil can still adequately "hold" them."

3. **Response to General Comment Number 3:** If a chemical is above saturation limits or a sample location exceeds the soil attenuation capacity, it must not be included in the 95UCL concentrations. The most critical factor in evaluating data for soil contact exposure is the spatial distribution of the data. If a hot spot is present in an area that can be visited more frequently, exposures to hot spot must be evaluated separately. The risk assessor needs to ensure that 95UCL used is representative of concentration throughout the site and that contact with soil is equally probably throughout the exposure area.

4. **Response to General Comment Number 6:** A reference to these tables in the RI Report must be added to the HHRA.

5. **Response to General Comment Number 11:** The original comment requested a summary for the HHRA report that will enable the reader of the HHRA to quickly understand the findings of the HHRA report. Section 7 of the RI report does provide some of this requested summary information and tables, but this should also appear in the HHRA report. For example, on page 7-9 of the RI report is the table "Summary of Pathways Evaluated in the HHRA", but this table does not appear in the HHRA report, and should. This is the same for the table on 7-6, "Analytical Data Used for the HHRA". Neither the HHRA nor the RI provides a summary table listing the chemicals of potential concern, by media and exposure scenario, but this should appear in both reports.

   The response fails to acknowledge that COPCs were detected in a surface water sample reported in the 1998 SEH HHRA report, as well as in the context of the NSPW response to comment 16, as it appears on page 6 of the document. This data needs to be included in the HHRA, as well as a qualitative discussion of the data and slicks observed in the Bay.

6. **Response to General Comment Number 19:** RAGS E recommends performing a quantitative assessment for dermal contact with PAHs. Further guidance for evaluating this pathway is provided on the EPA Region 3 website. The dermal pathway must be quantified for PAHs.

The response fails to acknowledge that the human health risks of dermal adsorption by PAHs were quantified in the 1998 SEH HHRA report. All qualitative and quantitative findings of the 1998 HHRA report need to be addressed and incorporated in the current HHRA report.

In addition, the response attempts to rule out examining worker contact with contaminated water in the trenches by stating that "groundwater is typically removed from excavated areas". The response fails to acknowledge that subsurface conditions are not typical in Kreher Park, where the park is predominantly comprised of historic lake bottom filled with porous materials and covered with top soil. When interviewing workers of the former WWTP, many commented on frequently working in trenches dug across the park that quickly filled with water containing oil sheens, slicks, tars and NAPLs, and that their arms and legs often became coated with tars and oils. As opposed to risk assessments that evaluate hypothetical future exposure scenarios, this is an actual exposure that repeatedly occurred in the past. Evaluating the health risks of construction workers who came in contact with contaminated water in trenches at the park needs to be part of the HHRA.

Dermal contact with groundwater that is being pumped from an excavation can occur. Inhalation of vapors released from groundwater into a trench can occur. These exposure routes need to be quantified for the construction worker.

Specific Comments

1. **Response to Specific Comment Number 4:** See General Comment #5 above.

2. **Response to Specific Comment Number 5:** The area is highly recreational: risks to recreational fishers needs to be evaluated.

   While we are not necessarily aware of specific area anglers who are not tribal members and meet the definition of "subsistence angler", it is reasonable to assume that they are present and must be included in risk calculations.

3. **Response to Specific Comment Number 7:** The EPC is an average over an exposure area. The exposure area should be representative of the area used by the receptor group. The EPA's default exposure area for a residential setting is 0.5 acres. The samples used to calculate an average lead concentration include those collected from throughout the Upper Bluff (?? acres) and Kreher Park (13 acres). Potential hotspot areas of lead need to be evaluated, especially if the high lead concentrations are present in the Upper Bluff area, where residences and a school are located. Also see Specific Comment 12.

4. **Response to Specific Comment Number 12:** As stated in RAGS, "In evaluating monitoring data for the assessment of soil contact exposure, the spatial distribution of the data is a critical factor. If a hot spot is located near an area which because of site or populations characteristics, is visited or used more frequently, exposure to the hotspot should be assessed separately. The areas over which the activity is expected to occur should be considered when averaging the monitoring data for a hotspot. For example,

averaging soil data over an area the size of a residential backyard (e.g., an eight of an acre) may be most appropriate for evaluating residential soil pathways."

The area of the Upper Bluff is considerably larger than a residential lot and a construction worker in a trench is exposed over a small area. Potential risks from hotspots of contamination needs to be evaluated in the HHRA.

5. **Response to Specific Comment Number 21**: Default values for construction activities as presented in Appendix E the EPA 2002 guidance can be used to develop a PEF. Using the default PEF will underestimate particulate emissions for a construction scenario.

If you have any questions or would like to discuss things further, please contact me at (312) 886-1999.

Sincerely,

Scott K. Hansen
Remedial Project Manager

cc: Dave Trainor, Newfields
Jamie Dunn, WDNR
Omprakash Patel, Weston Solutions, Inc.
Henry Nehls-Lowe, DHFS
Ervin Soulier, Bad River Band of the Lake Superior Chippewa
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